WEST

End of Result Set

Generate Collection Print

L2: Entry 2 of 2 File: USPT Mar 30, 1999

US-PAT-NO: 5888507
DOCUMENT-IDENTIFIER: US 5888507 A

TITLE: Treatment for insulin dependent diabetes

DATE-ISSUED: March 30, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Burkly; Linda C.	West Newton	MA		

US-CL-CURRENT: 424/130.1; 424/133.1, 424/145.1, 424/152.1, 424/158.1, 424/172.1, 514/2

CLAIMS:

I claim:

1. A method for the treatment of insulin dependent type I diabetes comprising administering to a prediabetic mammal, or a mammal having partial .beta. cell destruction, one or more compositions selected from the group consisting of an antibody capable of binding to the .alpha..sub.4 subunit of VLA-4, an antigen binding fragment of said antibody and a soluble VCAM-1 polypeptide capable of binding to the .alpha..sub.4 subunit of VLA-4, in an amount effective to treat diabetes.

2. A method according to claim 1, wherein the soluble VCAM-1 polypeptide comprise a VCAM-IgG fusion.

3. A method according to claim 1, wherein the composition is administered in an amount effective to provide a plasma level of a soluble VCAM-1 polypeptide in the mammal of at least 10-20 .mu.g/ml over a period of 1-14 days.

4. A method according to claim 1, wherein the soluble VCAM-1 polypeptides comprise VCAM 2D-IgG.

5. A method according to claim 1, wherein the composition comprises anti-VLA-4 monoclonal antibodies or VLA-4-binding fragments thereof.

6. A method according to claim 1, wherein the composition is administered at a dosage so as to provide from about 0.1 to about 10 mg/kg of antibody or an antigen binding fragment of said antibody, based on the weight of the susceptible mammal.

7. A method according to claim 1, wherein the composition is administered in an amount effective to block VLA-4 antigen on VLA-4 positive cells in the peripheral blood for a period of 1-14 days.

8. A method according to claim 1, wherein the composition is administered in an amount effective to provide a plasma level of antibody or an antigen binding fragment of said antibody, in the mammal of at least 1 .mu.g/ml over a period of 1-14 days.

9. A method according to claim 1, wherein the composition comprises an antibody or an antigen binding fragment of said antibody capable of binding to the .alpha..sub.4 subunit of VLA-4.

10. A method according to claim 1, wherein the composition comprises a soluble VCAM-1 polypeptide capable of binding to the .alpha..sub.4 subunit of VLA-4.

11. A method according to claim 1, wherein the antibody is a recombinant antibody.

12. A method according to claim 1, wherein the antibody is a humanized antibody.

13. A method according to claim 1, wherein the mammal is prediabetic.

14. A method according to claim 1, wherein the mammal has partial .beta. cell destruction.